Nuclear Discussion Forum 2017:
“The Effect of New Technologies on Nuclear Non-proliferation and Disarmament: Artificial Intelligence, Hypersonic Technology and Outer Space”

Organised by the Permanent Mission of Kazakhstan in collaboration with the United Nations Office for Disarmament Affairs

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4 October, 2017
New York
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Distinguished panellists

Distinguished delegates, ladies and gentlemen

At the outset, let me express my gratitude to the Permanent Mission of Kazakhstan for its ongoing partnership. Since its foundation in 2011, the Nuclear Discussion Forum has become a valued institution for delegations and missions interested in this vital subject.

I would also like to extend my sincere thanks to our three panellists: Dr. James Acton, Co-director, Nuclear Policy Programme, and Senior Fellow at the Carnegie Endowment for International Peace; Dr. Joan Johnson-Freese, Professor and Chair of National Security Affairs, US Naval War College, Rhode Island; and, Dr. Paul Scharre, Senior Fellow and Director, Technology and National Security at the Center for a New American Security, Washington D.C., for agreeing to share their much sought after expertise. I look forward to hearing your valuable insights.

When we talk about ‘new’ or ‘emerging’ technologies we are, in effect, talking about a suite of technological innovations that are already revolutionising transportation, healthcare, manufacturing and the services industry.

However, the same innovations also have military applications or could otherwise impact peace and security through misuse. Some are enabling technologies – such as machine learning or information and communications technologies; others are dual-use – such as synthetic biology or sensor-based technologies; and others are, at this stage, purely military – such as conventional missiles using hypersonic technology.

Taken together these innovations have the long-term potential to change how wars are fought. In the near-term they could impact stability, international humanitarian law and human rights. We are already witnessing this through the growing number of offensive cyber operations and the use of armed unmanned aerial vehicles.

Unlike previous military revolutions, these innovations are being driven largely by the private sector. And unlike other major leaps in weapon capabilities, often it is the cumulative impact of technology, rather than a single system. Consider, for example, the possibility of a networked autonomous drone using space-based systems for guidance and facial-recognition software for targeting.

This technological revolution is also occurring at a time of growing geopolitical instability and inflamed regional disputes. In combination with potentially game-changing weaponised technology, this could have dangerous implications for peace and security.

Seeking to address these challenges raises several questions.

First, do we have a clear enough picture of the ramifications of these new weapons – including their combined ramifications or how they will be used – to make a proper judgement?
Second, what is the scope of governance or regulation required to ensure they do not become destabilising or are not used either for purposes for which they were not intended, or in contravention of international law?

Third, is the current system fit for purpose or do we need to consider new instruments and initiatives? Do we need new confidence-building and transparency measures? New treaties?

Fourth, how can they be regulated without stifling innovation or inhibiting technology transfers that could enable sustainable development?

The UN system is already attempting to grapple with some of these across various forums. But this brings me to my final question – are we moving fast enough and are we doing so in a way that addresses these challenges strategically and holistically?

These questions underscore the importance of events such as today’s and why we need input from experts such as our esteemed panellists. If we are to address the disarmament and non-proliferation challenges of the twenty-first century, we need to build the necessary coalitions. This means bringing not only all governments into the tent but also industry – the technological drivers – as well as academia and civil society.

I look forward to the outcomes from today’s event and I hope it will provoke a robust debate among delegations.

Thank you.